

ATTORNEY DOCKET NO. 97-S-159 (STMI01-97159)
U.S. SERIAL NO. 09/207,136
PATENT

REMARKS

Claims 1-8, 11-20, 25-27 and 31-33 are pending in the present application.

Claims 1, 5-6, 8, 19-20, 25-27 and 33 were amended herein. Claim 1 was amended solely for clarity, restating limitations from a passive voice to an active voice (e.g., "instructing" in place of "that instructs") and explicitly reciting limitations inherent in the claim (i.e., that the encoded audio/video stream is one selected from one or more within the data source) without altering the scope of the claim. Similarly, claims 20 and 25 were amended for like reasons and without altering the scope of those claims. Claim 8 was amended to compress the limitations of claims 8-10 into a single dependent claim. Claims 26-27 and 33 were amended solely to delete superfluous language.

Claims 9-10 and 28-30 were canceled herein.

Reconsideration of the claims is respectfully requested.

35 U.S.C. § 102 (Anticipation)

Claims 1, 5-8, 14-17, 19, 25, 28-30 and 32 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,933,569 to *Sawabe et al.* This rejection is respectfully traversed.

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. MPEP § 2131; *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567

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(Fed. Cir. 1990). Anticipation is only shown where each and every limitation of the claimed invention is found in a single prior art reference. MPEP § 2131; *In re Donohue*, 766 F.2d 531, 534, 226 U.S.P.Q. 619, 621 (Fed. Cir. 1985).

Independent claims 1, 20 and 25 each recite a file reader capable of obtaining any encoded audio/video data stream from a data source, a navigator instructing the file reader to obtain a selected encoded audio/video data stream from the data source, and a splitter separating the encoded audio/video data stream obtained by the file reader into one or more component data streams. Such a combination of features is not depicted or described by the cited reference. The Office Action equates optical pickup 80 in *Sawabe et al* with the recited file reader capable of obtaining any encoded audio/video data stream from a data source. However, optical pickup 80 is merely part of a DVD drive system within *Sawabe et al* (including drive control 101, spindle motor 102 and slider motor 103), and is simply used to read information bits from the optical disk 1. A "file reader," as the term is used in the specification, must be capable of accessing data utilizing a file system, such as the CD File System - Small Computer Serial Interface (CFS-SCSI), via operating system file system calls and a device driver:

As such, the DVD player program 122 reads the DVD stream 200 by requesting the operating system 120 to open a file on the DVD drive 106 that contains the DVD stream 200. The DVD stream 200 is read from the DVD drive 106 using normal file system calls of the operating system 120.

....

The DVD driver 314 provides the kernel mode software capabilities of reading data sectors from DVD drive 32. The CD File System - Small Computer Serial Interface (CDFS-SCSI) 312 and the DVD driver 314 are examples of SCSI

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interfaces and drivers that may be used to access the DVD drive 32 and may be part of the overall operating system 120 (FIGURE 2) of may be purchased separately and installed with the purchase of a DVD drive 32.

The DVD file reader 310 reads the DVD stream 200 from the DVD drive 32. . . .

Specification, page 18, lines 3-7 and page 23, lines 11-18. *Sawabe et al* is silent as to any software or hardware system functioning as a file reader. Moreover, the Office Action provides no reasonable basis for concluding that the optical pickup 80 disclosed in *Sawabe et al* is functionally equivalent to the recited file reader, and is therefore arbitrary and capricious in asserting such equivalence.

In addition, dependent claim 19 has been amended to differentiate between the recited file reader and a DVD drive, of which the optical pickup 80 in *Sawabe et al* is a part.

The Office Action does not identify any specific element within *Sawabe et al* as satisfying the claim recitation of a navigator instructing the file reader to obtain a selected encoded audio/video data stream from the data source, but instead merely points to the fact *Sawabe et al* describes reading streams from the optical disk 1 by controlling the spindle and slider motors:

Then, the drive controller 101, to which the seamless control signal Scs1 is inputted, outputs a drive signal Sd to the spindle motor 102 or the slider motor 103. By this drive signal Sd, the spindle motor 102 or the slider motor 103 moves the optical pickup 80 such that the record position to be reproduced on the DVD 1 is irradiated with the light beam B (refer to an arrow of a broken line in FIG. 16), and the spindle motor 102 CLV-controls (Constant Linear Velocity-controls) the rotation number of the DVD 1. Along with this, the drive controller 101 outputs the aforementioned switch signal Ssw1 on the basis of the

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seamless control signal Scsl, so as to open the stream switch 82 when the demodulation signal Sdm is not outputted from the demodulate and correct unit 81 while the optical pickup 80 is being moved, and so as to close the stream switch 82 when the demodulation signal Sdm is started to be outputted, so that the demodulation signal Sdm is outputted to the track buffer 83.

Sawabe et al, column 18, lines 48–65. However, *Sawabe et al* is silent as to instructing a file reader to obtain a selected encoded audio/video data stream from the data source as recited in the claims. The Office Action provides no reasonable basis for concluding that controlling a spindle and slider motor as disclosed in *Sawabe et al* is functionally equivalent to the recited navigator instructing the file reader to obtain a selected encoded audio/video data stream from the data source, and is therefore arbitrary and capricious in asserting such equivalence.

In addition to failing to depict or describe a file reader and navigator individually, *Sawabe et al* is silent as to an overall structure organized as a file reader and navigator. As taught in the specification:

This implementation allows the motion compensation pipeline to be specified and implemented either separately or together with the block decode section with minimal coordination. The calculation of memory addresses and generation of pipeline control information may proceed in parallel with the data manipulation. In addition, the parsing and data filtering functions are decoupled from the motion compensation functions. And finally, the motion compensation pipeline may be fabricated in hardware while the parsing and motion compensation calculations are implemented in software.

Specification, page 8 line 21 through page 9, line 6. *Sawabe et al* does not depict or describe a structure organized according to the claims.

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Independent claims 1 and 25 each further recite a reprogrammable proxy filter decoding and converting component data streams. Such a feature is not depicted or described in the cited reference. The Office Action equates buffers and decoders 87-95 with the recited reprogrammable proxy filter. However, *Sawabe et al* is silent as to any reprogrammable capabilities for buffers and decoders 87-95. Moreover, the hardware buffers and decoders 87-95 do not comprise a proxy filter as that term is employed in the specification. As taught in the specification, the proxy filter is a software component feeding the component streams to decoders and synchronizing the streams, and may be updated in the field to add new features and/or add or delete decoders. Specification, page 24, line 10 through page 25, line 15. The claim limitation of a reprogrammable proxy filter is not satisfied by the hardware buffers and decoders 87-95 depicted and described in *Sawabe et al*.

Claim 6 recites that the navigator is coupled to the splitter such that the navigator can use the navigation data stream to select the encoded audio/video data stream to be obtained according to one or more selection signals received from the user interface. Such a feature is not depicted or described in the cited reference. *Sawabe et al* contains no indication that controller 100 (equated in the Office Action with the recited navigator) receives a navigation data stream. *Sawabe et al* states that system buffer 85 passes accumulated control data 11 to system controller 100 via control signal Sc, but is silent as to system controller 100 using such data to select an audio/video data stream to be obtained.

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Therefore, the rejection of claims 1, 5-8, 14-17, 19, 25 and 32 under 35 U.S.C. § 102 has been overcome.

35 U.S.C. § 103 (Obviousness)

Claims 2-4, 20 and 26-27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sawabe et al* in view of U.S. Patent No. 5,999,698 to *Nakai et al*. Claims 9-11 and 31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sawabe et al* in view of U.S. Patent No. 5,987,417 to *Heo et al*. Claims 12-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sawabe et al* in view of *Heo et al* and U.S. Patent No. 5,990,958 to *Bheda et al*. Claims 18 and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sawabe et al* in view of U.S. Patent No. 5,642,171 to *Baumgartner et al*. These rejections are respectfully traversed.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444

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(Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142.

As noted above, each of the independent claims recites a file reader and a navigator, which are not shown or suggested by *Sawabe et al.* Such features are also not shown or suggested in any of *Nakai et al.*, *Heo et al.*, *Bheda et al.* or *Baumgartner et al.*

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In addition, claims 2, 20 and 26 each recite a user interface connected to the navigator for selecting the encoded audio/video data stream to be obtained. Such a feature is not depicted or described in the cited references. Figure 8 of *Nakai et al*, cited in the Office Action as satisfying this feature, merely depicts a remote control device allowing user operation of a DVD player to manipulate playback of a current or adjacent track. *Nakai et al* is silent as to enabling a user to select an encoded audio/video data stream to be obtained from among a plurality of encoded audio/video data streams.

Therefore, the rejection of claims 2-4, 9-13, 18, 20, 26-27, 31 and 33 under 35 U.S.C. § 103 has been overcome.

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AMENDMENTS WITH MARKING TO SHOW CHANGES MADE

Claims 1, 5-6, 8, 19-20, 25-27 and 33 were amended herein as follows:

- 1 1. (currently amended) A digital audio/video decoder comprising:
2 a file reader capable of obtaining any of one or more encoded audio/video data streams
3 from a data source;
4 a navigator [that instructs]instructing the file reader to obtain [the]a selected encoded
5 audio/video data stream from the data source;
6 a splitter [that separates]separating the encoded audio/video data stream obtained by the
7 file reader into one or more component data streams; and
8 a reprogrammable proxy filter [that decodes and converts]decoding and converting the
9 one or more component data streams into three or more renderable signals including at least one
10 renderable audio signal and at least two renderable video signals.

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1 5. (currently amended) The digital audio/video decoder as recited in claim [1]2, wherein the
2 one or more component data streams further comprises:

3 an audio data stream;

4 a video data stream;

5 a subpicture data stream; and

6 a navigation data stream.

1 6. (currently amended) The digital audio/video decoder as recited in claim 5, wherein the
2 navigator is coupled to the splitter such that the navigator can use the navigation data stream to
3 select the encoded audio/video data stream to be obtained according to one or more selection
4 signals received from the user interface.

1 8. (currently amended) The digital audio/video decoder as recited in claim 1, wherein the
2 reprogrammable proxy filter can decode and convert [a] component data streams that
3 conform[s] to one or more of an MPEG coding standard, a Dolby AC-3 coding standard, a PCM
4 coding standard.

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1 19. (currently amended) The digital audio/video decoder as recited in claim 17, wherein the
2 data source is a digital video disk (DVD), the digital audio/video decoder further comprising:
3 a DVD device driver; and
4 a DVD drive.
5 wherein the file reader accesses the DVD through the DVD device driver and DVD
6 drive.

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20. (currently amended) A digital audio/video decoder comprising:

a file reader capable of obtaining any of one or more encoded audio/video data streams from a data source;

a navigator [that instructs]instructing the file reader to obtain [the]a selected encoded audio/video data stream from the data source;

a user interface connected to the navigator and having one or more predefined functions for selecting [the]an encoded audio/video data stream to be obtained;

a splitter [that separates]separating the encoded audio/video data stream obtained by the file reader into an audio data stream, a video data stream, a subpicture data stream and a navigation data stream[;], wherein the navigator [being]is coupled to the splitter such that the navigator can use the navigation data stream to select the encoded audio/video data stream to be obtained;

an audio filter [that decodes and converts]decoding and converting the audio data stream into a renderable audio signal;

a video filter [that decodes and converts]decoding and converting the video data stream into a renderable video signal;

a subpicture filter [that decodes and converts]decoding and converting the subpicture data stream into a renderable subpicture signal;

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19 a mixer [for] combining the renderable subpicture signal with the renderable video signal
20 and producing a combined video signal;
21 a synchronizing filter [for] synchronizing the renderable audio signal and the combined
22 video signal;
23 an audio renderer coupled to the audio decoder and an audio application program
24 interface, the audio renderer controlling the manipulation and rendering of an audio signal from
25 the renderable audio signal; and
26 a video renderer coupled to the mixer and a video application program interface, the
27 video renderer controlling the manipulation and rendering of a video signal from the combined
28 video signal.

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25. (currently amended) A digital audio/video system comprising:

a DVD drive;

a file reader communicably coupled to the DVD drive to obtain any of one or more encoded audio/video data streams from the DVD drive;

a navigator communicably coupled to the file reader [to instruct]and selectively instruction the file reader to obtain [the]a particular encoded audio/video data stream from the DVD drive;

a splitter communicably coupled to the file reader [that separates]and separating the encoded audio/video data stream into one or more data streams;

a reprogrammable proxy filter communicably coupled to the splitter [that decodes and converts]and decoding and converting the one or more component data streams into three or more renderable signals including at least one renderable audio signal and at least two renderable video signals;

a mixer communicably coupled to the reprogrammable proxy filter [for]and combining the at least two renderable video signals and producing a combined video signal;

an audio renderer coupled to the reprogrammable proxy filter and an audio application program interface, the audio renderer controlling the manipulation and rendering of the at least one renderable audio signal; and

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19 a video renderer coupled to the mixer and a video application program interface, the
20 video renderer controlling the manipulation and rendering of the combined video signal.

1 26. (currently amended) The digital audio/video system as recited in claim 25, further
2 comprising a user interface connected to the navigator [for]and selecting the encoded
3 audio/video data stream to be obtained.

1 27. (currently amended) The digital audio/video system as recited in claim 26, wherein the user
2 interface further comprises more than one predefined function[s] for selecting the encoded
3 audio/video data stream to be obtained.

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1 33. (currently amended) The digital audio/video system as recited in claim 25, further
2 comprising:

3 a sound card;

4 an audio driver [for] receiving the rendered audio signal from the audio application
5 program interface and controlling the sound card such that an audio output signal is produced
6 from the rendered audio signal;

7 a video graphics adapter; and

8 a video driver [for] receiving the rendered video signal from the video application
9 program interface and controlling the video graphics adapter such that a video output signal is
10 produced from the rendered video signal.

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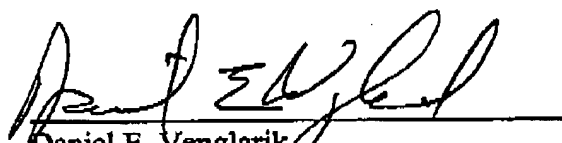
If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *dvenglarik@davismunck.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

DAVIS MUNCK, P.C.

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